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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SR-6J

October 21, 2021

John Wolski
Senior Remediation Manager
Raytheon Technologies - Corporate Remediation
9 Farm Springs Road
Farmington, CT 06032

Subject: **Review of *Second Quarter 2021 Groundwater Management Zone (GMZ) Monitoring and System Performance Report (2Q 2021 Report)***
Hamilton Sundstrand Corporation (HSC) Plant 1/2 Facility
Southeast Rockford Groundwater Contamination Superfund Site, Rockford, Illinois
ILD981000417

Dear Mr. Wolski:

U.S. Environmental Protection Agency (EPA) has reviewed the above titled document dated September 13, 2021 prepared by AECOM on behalf of HSC for the Southeast Rockford Groundwater Contamination Superfund Site, Source Area 9/10 (SA 9/10) in Rockford, Illinois.

Based on EPA comment letter for 1Q 2021 Report, it appears those comments applicable to this 2Q 2021 Report have been implemented per EPA review of the 2Q 2021 Report and the associated response to comment letter.

2Q 2021 comments are below. EPA requests that these comments be addressed and a revision of 2Q 2021 Report be submitted, as the comments describe what appear to be errors or anomalies that warrant additional clarification or revision for 2Q reporting and the public record. If there are uncertainties or differences of opinion with any of the below comments please contact me so that we may discuss and agree on an appropriate path forward.

Comments

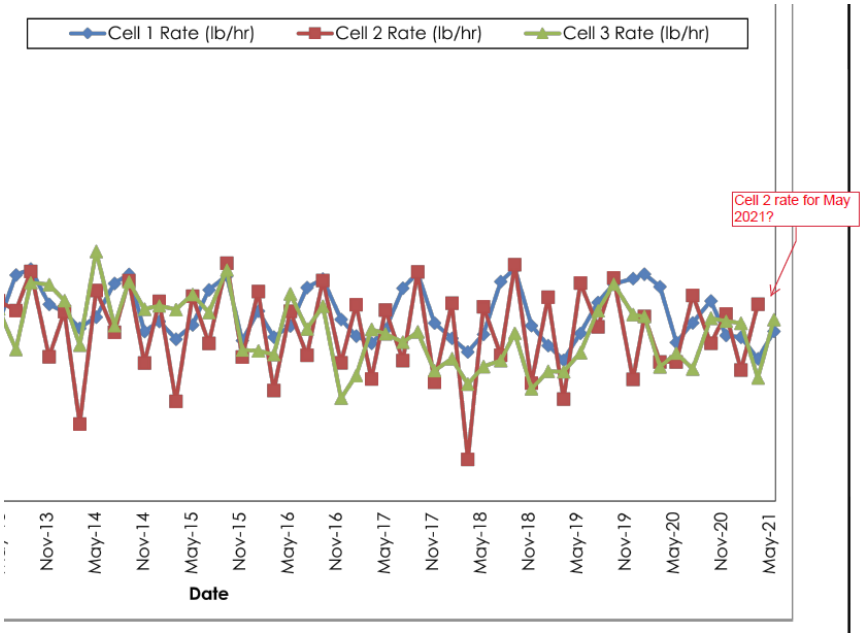
1. **Table 4.6. Cell 1 Column. End of Table.** Cell 1 appears to have been off from the period 3/26-5/26, but the cumulative mass removed increased. Please verify and correct as necessary.

Pulse-off period July 22, 2020 to September 29, 2020						
9/29/2020	14999	0.00	55.03	14999	0.00	119.
11/25/2020	15246	0.00	55.13	15246	0.00	119.
Pulse-off period November 25, 2020 to January 21, 2021						
1/21/2021	15247	0.00	55.13	15247	0.00	119.
3/26/2021	15524	0.00	55.20	15524	0.00	119.
Pulse-off period March 26, 2021 to May 26, 2021						
5/26/2021	15524	0.00	55.21	15524	0.00	119.

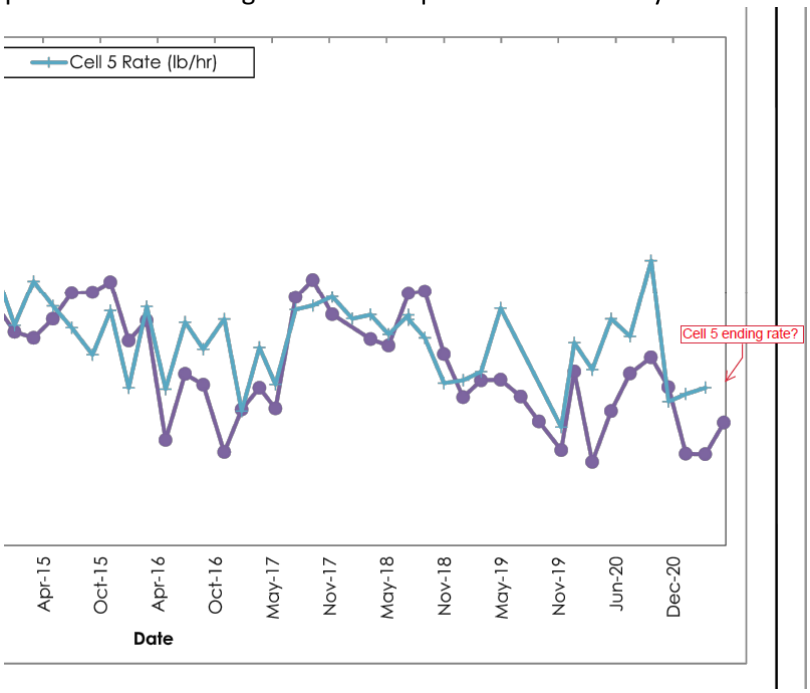
2. **Table 4.6. Mass Removal Rate.** Beginning in about 2011 for cells 1-3 and 2012 for cells 4-5 the mass removal rate is stated as '0.00'. Clearly the rate is not zero, but it is below the precision of the number used in the table. The rate value should be converted to scientific notation similar to what is shown in Table 4.5 for the removal rates of the various COCs.

3. **Figure 4.** There are dashed potentiometric lines in the figure. Please add this symbol and definition (dashed where inferred/approximately located) to the legend.

4. **Figure 5**. The results box for PMW02 shows two rows for 24-Feb-21. Verify and correct as necessary.



6. **Figure 9.** There appears to be a missing value on this plot for Cell 5. Verify and correct as necessary**.**

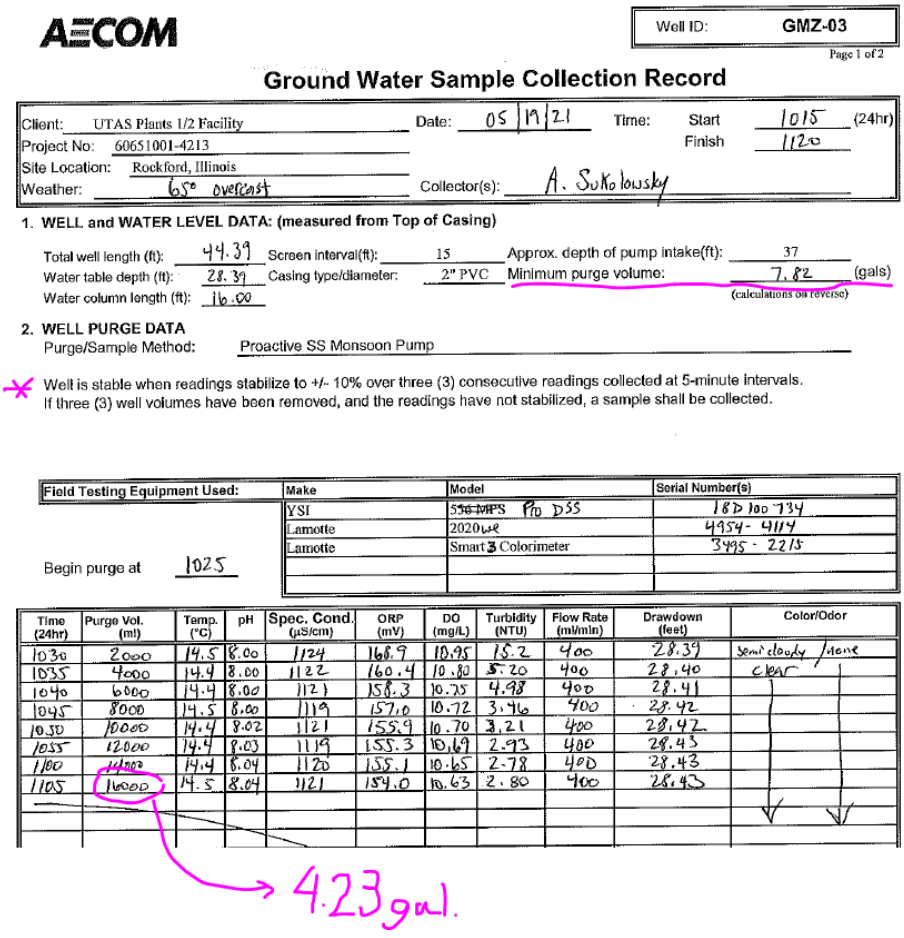


7. **Appendix D.**
    a. Well identifications (IDs) in Appendix D don't match well IDs in the various components of this report; report and letter text, appendices, figures, and tables (RAMW-01 vs RAMW01, GMZ-01

vs GMZ01, etc.). Name consistency for wells should be verified and corrected as necessary throughout the deliverable (and electronic data deliverable (EDD)).

b. Field notes indicated that sampling criteria for collecting samples from groundwater wells would meet a 10% stabilization target for the field parameters in three consecutive 5-minute intervals (marked by pink * on image below). If stabilization could not be met, then the sample could be collected after three well volumes have been removed from the well. There is an inconsistency in the field forms relating to reporting the minimum purge volume (underlined in pink; equal to 3 well volumes) and the statement about stabilization criteria. The field form is not clear on which takes precedence and if this follows the UFP-QAPP and low flow groundwater sampling standard operating procedure (SOP).

Additionally, the low flow groundwater SOP (Attachment 1 page 8) in the UFP-QAPP indicates a more nuanced stabilization target (e.g., +/- 0.1 for pH, +/- 3% for SEC, +/- 10 millivolts for ORP, etc.) than the generalized 10% in the field form. If these (and others in 2Q 2021) collections are deviations from the UFP-QAPP this should be documented in a deviations (or similarly named) section of the report.



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Well ID: GMZ-03

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Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility
Project No: 60651001-4213
Site Location: Rockford, Illinois
Weather: 65° overcast

Date: 05/19/21
Time: Start 1015 (24hr)
Finish 1120
Collector(s): A. Sokolowsky

1. **WELL and WATER LEVEL DATA: (measured from Top of Casing)**

Total well length (ft): 44.39
Water table depth (ft): 28.39
Water column length (ft): 16.00
Screen interval(ft): 15
Casing type/diameter: 2" PVC
Approx. depth of pump intake(ft): 37
Minimum purge volume: 7.82 (gals)
(calculations on reverse)

2. **WELL PURGE DATA**
Purge/Sample Method: Proactive SS Monsoon Pump

* Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals. If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	~~556 MPS~~ Pro DSS	18D100734
	Lamotte	2020we	4954-4114
	Lamotte	Smart 3 Colorimeter	3495-2215

Begin purge at 1025

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1030	2000	14.5	8.00	1124	168.9	10.95	15.2	400	28.39	semi cloudy / none
1035	4000	14.4	8.00	1122	160.4	10.80	5.20	400	28.40	clear
1040	6000	14.4	8.00	1121	158.3	10.75	4.98	400	28.41	
1045	8000	14.5	8.00	1119	157.0	10.72	3.46	400	28.42	
1050	10000	14.4	8.02	1121	155.9	10.70	3.21	400	28.42	
1055	12000	14.4	8.03	1119	155.3	10.69	2.93	400	28.43	
1100	14000	14.4	8.04	1120	155.1	10.65	2.78	400	28.43	
1105	16000	14.5	8.04	1121	154.0	10.63	2.80	400	28.43	

4.23 gal.

Furthermore, at one location (see below) a little over one well volume was removed and 4 stabilization criteria measurements made. As described above, it is unclear from this form regarding precedence in stabilization versus minimum purge volume. Please clarify for 2Q 2021 and modify future field form templates as needed.

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Well ID: RAMW-05

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Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 5-19-21 Time: Start 1015 (24hr)
Project No: 60651001-4213 Finish 1100
Site Location: Rockford, Illinois
Weather: overcast 60-70 °F Collector(s): A. Hollatz

1. **WELL and WATER LEVEL DATA: (measured from Top of Casing)**

Total well length (ft): 43.73 Screen interval(ft): 15 Approx. depth of pump intake(ft): 36
Water table depth (ft): 27.35 Casing type/diameter: 2" PVC Minimum purge volume: 8 (gals)
Water column length (ft): 16.38 (calculations on reverse)

2. **WELL PURGE DATA**
Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	19K100867
	Lamotte	2020	738-8811
	Lamotte	Smart 2 Colorimeter	00598-4C16

Begin purge at 1020

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1030	5000	15.4	7.60	1569	248.7	10.70	5.82	500	27.35	clear/none
1035	7500	15.4	7.60	1571	249.0	10.71	5.35	500	27.35	
1040	~~10,000~~	15.4	7.60	1580	250.2	10.76	5.19	500	27.35	
1045	12,500	15.5	7.59	1585	251.0	10.77	4.98	500	27.35	

3.3 gal.

If you have any questions, please call me at (312) 886-7153.

Sincerely,

Jennifer Knoepfle

Jennifer Knoepfle, Ph.D., P.G.
Remedial Project Manager

cc (via electronic mail):
Brian Conrath, Project Manager, IEPA
Jon Alberg, Senior Principal, AECOM
Peter Hollatz, Project Manager, AECOM
Tom Turner, EPA ORC Attorney
Joe Richards, Hydrogeologist, USGS